

until the Regional Engineer has approved the program.

(b) If the construction, repair, or modification work is performed by a construction contractor, quality control inspection must be performed by the licensee, the design engineer, or an independent firm, other than the construction contractor, directly accountable to the licensee. This paragraph is not intended to prohibit additional quality control inspections by the construction contractor, or a firm accountable to the construction contractor, for the construction contractor's purposes.

(c) If the construction, repair, or modification of project works is performed by the applicant's or licensee's own personnel, the applicant or licensee must provide for separation of authority within its organization to make certain that the personnel responsible for quality control inspection are, to the satisfaction of the Regional Engineer or other authorized Commission representative, independent from the personnel who are responsible for the construction, repair or modification.

§ 12.41 Monitoring instruments.

(a) In designing a project, a licensee must make adequate provision for installing and maintaining appropriate monitoring instrumentation whenever any physical condition that might affect the stability of a project structure has been discovered or is anticipated. The instrumentation must be satisfactory to the Regional Engineer and may include, for example, instruments to monitor movement of joints, foundation or embankment deformation, seismic effects, hydrostatic pore pressures, structural cracking, or internal stresses on the structure.

(b) If an applicant or licensee discovers any condition affecting the safety of the project or project works during the course of construction or operation, the applicant or licensee must install and maintain any monitoring devices and instruments that may be required by the Regional Engineer or other authorized Commission representative to monitor that condition.

§ 12.42 Warning and safety devices.

To the satisfaction of, and within a time specified by, the Regional Engineer, an applicant or licensee must install, operate, and maintain any signs, lights, sirens, barriers, or other safety devices that may reasonably be necessary or desirable to warn the public of fluctuations in flow from the project or otherwise to protect the public in the use of project lands and waters.

§ 12.43 Power and communication lines and gas pipelines.

(a) A licensee must take all reasonable precautions, and comply with all reasonable specifications that may be provided by the Regional Engineer, to ensure that any power or communication line or gas pipeline that is located over, under, or in project waters does not obstruct navigation for recreational or commercial purposes or otherwise endanger public safety.

(b) Clearances between any power or communication line constructed after March 1, 1981 and any vessels using project waters must be at least sufficient to conform to any applicable requirements of the National Electrical Safety Code in effect at the time the power or communication line is constructed.

(c) The Regional Engineer may require a licensee or applicant to provide signs at or near power or communication lines to advise the public of the clearances for any power or communication lines located over, under, or in project waters.

§ 12.44 Testing spillway gates.

(a) *General requirement.* An applicant or licensee must make adequate provision, to the satisfaction of the Regional Engineer or other authorized Commission representative, to ensure that all spillway gates are operable at all times, particularly during adverse weather conditions.

(b) *Annual test.* (1) At least once each year, each spillway gate at a project must be operated to spill water, either during regular project operation or on a test basis.

(2) If an applicant or licensee does not operate each spillway gate on a